



THE FUTURE OF THE MEDICAL MAN *

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MONTREAL

Gentlemen of the-Graduating Class:

Need I tell you how I appreciate the honor that has been conferred on me by your dean and the medical faculty of Rush Medical College by asking me to address you this afternoon at this, the culminating moment of your university career? But let me confess to you that with the honor comes the sense of heavy responsibility. From him to whom much is given much is also asked. Time and again in the years that are to come, this graduation ceremony will recall itself to the minds of each one of you as marking an epoch. It would be well could I utter words which should impress themselves in such a way that they remain with you as part and parcel of the event, words memorable for themselves as well as of the occasion; but if the utterance of such words is given to few, very few, of us, it is proper that what I say should be not unworthy, that it should attune itself to the occasion. It would be out of harmony with the event were I to seize this opportunity to deliver my message as a pathologist, and enunciate my views concerning some moot point in medical science; were I to read you a lecture on advanced pathology.

I must perforce strive to utter thus that which will appeal to each of you, that which will be helpful. During the last few years you have been satiated with lectures on special topics; to-day it is for me to strive to sum up the significance of all this teaching—all this education—in one comprehensive address. For four years—aye, and for long years previously—you have been preparing to enter the practice of medicine; to-day

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you are at the very entrance of that practice, at the threshold; to-day the university gives you its testamur. Each one of you must be asking, "What of the future?" Now, I am far from wishing to inflict a sermon on you, but at this particular moment I do but reecho the thought that is uppermost in all your minds. All the work of all these years has led to this moment, and now what next? What about the years that are to come?

NATURE OF TRUE KNOWLEDGE

Well, gentlemen, I trust that I shall not shock you too much when I lay down that you know next to nothing; you are but at the beginning of knowledge. I say this knowing perfectly well that there is no period in the whole of a man's existence when he feels so replete, so distended, with medicine as immediately following on the final examination and graduation. I speak knowingly, for I have been there myself. But, gentlemen, this sensation is comparable to that of the woman who, suffering from flatus, imagines herself to be in the latter months of pregnancy. It is an equally false conception. In the first place, in a four-year course, however well conducted, your teachers can have given you but the basal outlines of their respective subjects. We know how small a portion of one subject we can instil into you in the brief months during which you sit under each one of us. That is the reason why we are constantly striving to lengthen our courses—why each year you are made to feel more and more the heavy burden of the training. The better the teacher, the more, I think, his conscience pricks him for the inevitable deficiencies of his curriculum; and, paradoxically, I may add, the simpler and more elementary he makes his teaching, realizing that, as his subject cannot possibly be covered, his time is best employed in laying down secure foundations on which later the student may build a fair and seemly superstructure.

In the second place, true knowledge consists not in cognition, in the possession of a store of facts, but in the capacity to utilize them. You may be chock full of medical data, but until you have learned to employ these data, until you have tested their value in practice, you are but, as it were, sucklings in medicine. Heaven preserve the patients of the man who passes straight from graduation into private practice! Great as is the *vis medicatrix naturae*, that imposes all too heavy a strain

on it. This only would I say, that the vast increase in the practical work of the course that has been brought about during the last generation should make the student more secure of his data, more capable of using them with advantage; but notwithstanding the increased contact with the actual patient during the last two years of the course, which in comparison with your predecessors you have been afforded, I still doubt whether to-day the student on graduation is as capable of launching out into the world, is as serviceable to his patient, as was the product of the days of apprenticeship forty years ago. When it comes to a matter of differential diagnosis, he may be vastly his superior; but in knowledge of treatment of the patient as distinct from his disease, he is as vastly inferior. Wherefore, I trust that one and all of you before me have dedicated yourselves to at least a year of hospital internship, that you may learn the art as distinguished from the science of medicine.

That learned old physician, John Caius, physician in succession to Edward VI, Mary and Elizabeth (at whom, indeed, Shakespeare seems to have poked fun), when he refounded the college which bears his name in Cambridge, with that love of symbolism not uncommon in his generation, built three gates. The gate of entrance with its little wicket (now significantly removed as a relic into a back garden) he called the Gate of Humility. In the midspace of the college, supported on either side by the students' rooms and college buildings proper (which on their foundation stone were dedicated to Knowledge) was and still is a wide and lofty archway, of almost Roman simplicity and severity, with the inscription "Virtutis"—the Gate of Virtue (and of Wisdom). At the farther end, leading out to the public schools, where the university confers its degrees, is the exquisite and richly ornamented Gate of Honor, about the earliest example of Italian Renaissance architecture to be found in England. All of which is a parable. I for long wondered why Caius when he made this gate so beautiful made it so diminutive. On first thought, one would expect something of goodly size, suggesting a triumphal arch. But no, the passage through it is narrower and lower than that through the old gate of entrance; the Gate "Virtutis" would as it were swallow several of it. Did he not here intend another parable—that the man who completes his course with honor should pass out, out of the college into the

wider world, even as he entered college, with becoming and even greater humility?

You are thus at the beginning of medical learning, not at its end; but if true medical knowledge and wisdom come with practice—if you as medical men are to be students all through the days of your active life—how are you to comport yourselves toward your profession?

MEDICINE AS A BUSINESS

Here on the borders of the West, I feel some delicacy in entering on this subject; but at the same time, for the love of my profession, I recognize the necessity that I should speak frankly and urgently. For what in the East we call “the Western spirit” has entered into medicine. I protest against this appellation: this spirit is neither Eastern nor Western; it affects the whole continent; it affects the modern world in general; it is the spirit of the age. We live in an age when a man’s status is determined by his apparent wealth. That is inevitable with progressive democratization. Worth may make the man and the want of it the fellow. The more philosophic we are, the more freely we admit with the poet that all else is “leather and prunella”; but notwithstanding and nevertheless, save in the most outstanding cases, worth carries with it no social recognition—it is imponderable. Man—and woman—demands some standard of comparison, and if relative rank be largely abolished, there is nothing to fall back on but worldly possessions, whence it is that, whereas of old the physician, and his wife, had a status dependent on his profession—whereas he ranked next to the lawyer, and as a professional man took precedence of those engaged in commerce—to-day he who has scooped his millions from the manufacture of a quack remedy is accounted the greater, and takes without shame the upper seat; and almost perforce the physician is driven to strive after more than a mere modest competence, if he is to be of standing in the community.

Therefore the student entering medicine to-day is apt to have before him something not included in the hippocratic oath. Certain it is that an increasing proportion of medical men is more concerned over the means of improving its balance in the bank than over the means of improving the health of its patients, and regards social success as more to be considered than professional capacity. What is more, other influences

are leading in the same direction. It is to the credit of the young manhood of this country and this generation that it realizes as never before its duty to make its own way in the world. To me there is something splendid in this impatience of the yoke of indebtedness, in the determination to repay at the earliest moment, whether to parent or family friend, the heavy cost of the medical course. Often, it is true, I am torn between admiration and regret. I see men who, I am convinced, would become leaders in the profession could they devote a year or two to advanced medicine and research, men who would thereby reap some fifty, some one hundred-fold in the years that are to come, shortsightedly, as it seems to me, let slip the opportunity and consign themselves to mediocrity in their keen anxiety to be out of debt and independent. I think that in such cases my admiration predominates, but my regret is also poignant; but such men inevitably begin practice with the need to make a pecuniary success almost too prominently and constantly before them.

Then, again, it is but human to hold that there be a certain ratio between the amount of capital invested in any enterprise and the return yielded thereby. We may regard the time and money expended on his *éducation* by or on behalf of the medical student as the equivalent of capital invested. Within a generation—within little more than half a generation—this requisite capital has increased to an extraordinary extent. This fact was brought rudely before me within the last few days, when discussing with my old friend, the dean of the medical faculty of the University of Minnesota, Professor Westbrook, the developments that have occurred in the seventeen years during which he has been connected with that school. In 1895, when he joined the faculty, all that was demanded of the student was a course of three years of seven months each; in all, twenty-one months' instruction. Soon that was raised to four years of nine months—thirty-six months—more than half as much again. To-day, before the degree is granted, the university and the state demand six years of nine months (two years in arts and four in medicine), and one full year of twelve months in a hospital approved by the university. The three years of 1895 have given place to seven years, the twenty-one months to sixty-six. The time capital has been more than trebled, and the same must be true of the pecuniary outlay; and when we compare

the difference in the quality as well as in the quantity of education afforded, when we realize the quality of the output, is it to be wondered at that the physician of to-day should demand a higher return?

MEDICINE AS A PROFESSION

And yet, gentlemen, while admitting that there is an evident increase in the number of those medical men who regard their work as a business, the noble fact remains that to-day as in all ages the lure of medicine is such that the majority follow it from pure love of the work and of their fellows. The majority still devote themselves to it with the old spirit, caring little about the monetary return so long as they are secure of a decent competence; they regard it as what it is—a profession and not a trade. Their life work is to bring healing to the sick, to make the weak strong, to soothe the suffering, to help their kind. This to them is before all else. And here, in aiding poor humanity, the physician's work approaches the divine. It is at least suggestive that, as Dr. James Douglas has pointed out, of the twenty or twenty-two miracles recorded as being performed by the Founder of the Christian religion, no less than seventeen are acts of healing, of raising the sick, of restoring sight to the blind, of curing the palsied, of so-called casting out of devils, or restoring those apparently dead to life. It was through this power in healing the sick that Christ impressed his divinity on his generation. Whatever our faith or want of faith, this must strike us as most significant. "From the Most High cometh healing."

Indeed, this same spirit of devotion to the main object of our profession has been shown in our generation more than in any other period of the world's history. In every center of population throughout the world, we have presented groups of medical men giving their whole time and all their energies to the investigation and perfection of methods not of cure but of prevention of disease. We can proudly state that ours is the only profession which, were the making of money its prime object, with open eyes and set purpose indulges in the suicidal policy of endeavoring consistently to reduce its means of sustenance. Our leading thinkers, our leading investigators, have before them the banishment from among us of the vast array of infectious diseases, and in their efforts have the loyal support of the whole profession.

Thus in the body corporate of medical men, as in the body of each individual being, there is this constant war between opposing motives.

EVOLUTION OF MEDICAL IDEALS

Perhaps I have not been sufficiently following the biologic literature of the last few years, and what I am about to say is already a commonplace; but after a study of mendelian heredity I have wondered why no one has come prominently forward to demonstrate the why and wherefore of progressive evolution and its inevitability in the terms of dominant and recessive. So far as I can see, in every mating it is the positive acquirement or quality that is dominant; the defect or absence of the same that is recessive. Thus hairiness is apt to be dominant to smoothness or want of hairs; the presence of eye pigment to absence of pigment; with the result that if there be mating between the possessor of a dominant quality and a possessor of a recessive quality the offspring of the first generation all present the dominant quality. There it is, although not absolutely fixed; the recessive character is also present but latent; and if two of this generation mate the chances are that the recessive quality will show itself, but only in the proportion of one to four. Three out of four will present the dominant, the added quality; in one of the three firmly fixed, in the other two with the recessive quality also present but latent. In this way, you see, the dominant quality, acting on the majority of individuals of the strain, gradually becomes predominant, and there is the greater likelihood that if some further positive feature be acquired this will fall to the lot of some member of the major class; and so as the ages progress the inevitable tendency is to a steady increment of properties—to, in short, progressive cumulative evolution.

So it is with all true progress: it is cumulative; it has to be. Two centuries ago, beyond certain crude ideas regarding disinfection, preventive medicine was almost non-existent. The function of the physician was only to cure. Then this added idea of prevention showed itself in some of the greater men of the profession and steadily with successive generations, being a positive acquirement, it is becoming more and more a fixed principle of the profession.

Whither is it leading us? To this, it seems to me: The time is on us when the physician must make his

livelihood, not for the cure of the patient but for preserving him in health and preventing him from falling sick. There will always be with us what may be termed physiologic medicine, the caring for women in normal childbirth, for the very young and the very old; always traumatic medicine or surgery; always a certain not inconsiderable amount of family medicine—for Johnnie will indulge in green apples so long as there are Johnnies and apple-trees, and will suffer in consequence. Nay, more, I do not in the least imagine that we shall gain ascendancy over pathogenic bacteria as a body. I feel convinced that if we drive out such diseases as tuberculosis, typhoid and scarlet fever, we shall weaken the general bodily immunity. I think that we are realizing more and more that a man does not so much escape the ordinary infectious diseases because he has a strong inherited immunity, as because, by good fortune, he has time and again been exposed to mild subinfectious doses of the virus, and in neutralizing these has gained such immunity that later he is able to resist doses which would otherwise set up acute disease; and doing this that he raises not merely the specific but also the general resisting power of the organism.

If, therefore, we eradicate certain specific germs which to-day are widely spread, we are in danger of lowering the general resistance to disease; our bodies will not be so well educated to resist, and we shall be apt to succumb to microbes and diseases which in our present state are incapable of attacking us.

It follows that I imagine no Utopia from which infection will be banished; only a state of generally improved conditions of existence in which the exanthemas and the severer infections will be much reduced in their incidence, and the active curative work of the physician will be definitely reduced, the preventive work as definitely increased. Now, although the bacteriologist, detecting tubercle bacilli in the milk of a cow, by bringing about the compulsory slaughter of the beast prevents, it may be, a series of infants from succumbing to *tabes mesenterica*, that bacteriologist—virtuous as has been his action—cannot bill all the families of a particular milk-route for what he has saved them; cannot say to the parents, “The estimated value of your child’s life to you and to the community has been officially estimated at so much, the chance that it would become infected from this particular cow was such and such,

wherefore you owe me so much." The idea sounds absurd. But, as a matter of fact, the bacteriologist has accomplished all this, and if the individual cannot be asked to pay, it is for the community to show its appreciation. The more medicine becomes preventive, the more incumbent does it become on the community and the state, rather than on the individual, to subsidize the medical man.

I am no socialist, far from it. To me the doctrine that all men are born equal and are equal is as repugnant as it is manifestly false. How could we hope for progressive development, for the advance of our race, if all were at the same dead level; and if, notwithstanding the improvement in the individual, brought about by wise course of life in favorable surroundings, his offspring were after all only equal to that of the individual injured by unfavorable surroundings? The idea is unnatural, is contrary to the knowledge of evolution. It is on the face of it idiotic to maintain that the child born with the stigmata of congenital syphilis is equal to the child of sound parentage. That all be given, as far as possible, equal opportunities, that all be given a fair start, is quite another matter. If, therefore, I recognized a likelihood that the conversion of medicine into a public service would reduce all medical men to a common standard, no one would offer more active resistance. But I foresee that it means nothing of the kind. We are thus, I firmly believe, within measurable distance of the nationalization of the medical profession. I want you, gentlemen, to realize this, to face it clearly, and, what is more, to be prepared to help toward its accomplishment, living lives that will at once be a credit and a help to all our body. Such a momentous change should come from within the profession, not be forced on us from without.

I am not alone in this opinion; there are, I feel assured, others on this platform, members of your faculty, who are equally convinced that this has to come.

EUROPEAN PROGRESS IN PUBLIC HEALTH WORK

For what are the signs of the times? We on this continent call ourselves progressive, and we are progressive, but in this matter the Old World is leading the way. It is in no sense derogatory to us of the New World if, busied with the vast task of settling and establishing a continent, older countries across the ocean

with greater leisure are far beyond us in certain directions. We here, for example, are still in a mediæval condition as regards our Public Health Service. Individual cities, like your own, may be striving valiantly to place health matters on a proper footing; but take the country as a whole, and what do we find? Instead of securing those who have expert training as municipal health officers and paying them well, your ordinary municipalities elect either the youngest and rawest practitioner in the district or the man who has been a failure in private practice, to whom the shamefully inadequate stipend doled out by a grudging municipality is better than nothing. With such incapable minor officials, the state board of health, however capable its higher officials, is constantly impeded in its efforts. Here Germany and England are far ahead. Take the British conditions, which I know best. There every municipality must have its trained health officer, possessing a diploma of public health of an accredited university, and those posts are so well paid that I know from experience that universities have difficulty in procuring the best men to fill their professional chairs in hygiene, because the stipends afforded by the largest cities and more populous counties are so high that the attractions the universities can afford are insufficient. There is thus developed in Great Britain a definite career in preventive and public medicine, which to-day is attracting to it scores of the brightest of our men—a public service with definite grades and opportunities for promotion, with office dependent on capacity, independent of local and party politics, with permanency of tenure and popular respect. Bumbledom, it is true, does not love it, but Bumbledom is forced to submit under fear of such pains and penalties that perforce it cleans up its house and its back yard and reduces its infantile and other mortality.

This, however, as doubtless you all know, has been put into the shade by the further developments of the last few months, marshalled by Lloyd George. It is difficult to arrive at a sober, disinterested opinion regarding Lloyd George, so strong is the feeling he has aroused one way or the other. It seems impossible for any Englishman to appreciate his correct measure. If one can arrive at any judgment from the parliamentary proceedings, say by studying the *Times*, there can be no doubt that those proceedings and the tone of public life

in Great Britain have painfully deteriorated since he and his friend Winston Churchill have come to the fore. Doubtless, were I in the old country, with certain innate conservative tendencies, I should cordially loathe him. Seen dispassionately from a distance, he appears to be that rarest of combinations, a ranting demagogue possessed of constructive powers. In establishing the eye and artisan insurance, he was, it is true, only following the lead of Germany, but his insurance against sickness has followed distinctly original lines. Briefly, he said that this payment on the part of or on behalf of the artisan and his family for insurance against sickness led to other obligations. If the government made itself responsible for payment for disability, it must provide the medical attendance, must see that the sick man or woman received due care according to a definite scale; and that this must be provided by the state. Thus to-day in Great Britain there is compulsory insurance against sickness and disability for all those whose earnings are below a certain amount, and in return the government provides medical attendance. The medical men in any district who accept the government terms become in this way servants of the state. The worker, male or female, is given the power of selecting his medical attendant from the panel, and having selected him he is paid by the government at the rate of something under two dollars per year per head. His interest, therefore, is to preserve the health of his clients—the less active sickness there is the better for him and for everybody. There are, I should add, special payments for drugs, maternity cases, tuberculosis, etc., which here I need not enter into.

So, after a sharp and very bitter campaign, medical conditions in Great Britain have been revolutionized. What must impress those who have followed the fight put up by the profession is that our brothers across the water were not opposed to the principle of Lloyd George's measure; on the contrary, they were ready to admit it. What aroused their fury was the way in which the bill was introduced; the way in which they, brought up to glory in their professional independence, were forced to convert themselves into public servants without so much as a polite "by your leave"; were told what should be the registration fee without consultation. To modify slightly an old saying, it was not what Lloyd George did, but the nasty way in which he did

it. Wherefore, at first they refused to eat the Welshman's leek, but after it had been cut down somewhat and served in a more acceptable manner they eventually consumed it with fair grace. Now the measure has become law and matters are in process of adjustment. For example, the hospitals, both great and small, in Great Britain as here, have been established and are maintained by the voluntary contributions of the well-to-do. To-day, these supporters of the past are refusing further aid, on the ground that, as the rich are being heavily taxed by the government to meet the expenses of the new state of affairs, and as the government has made itself responsible for the sick poor, it and not they must bear the cost of medical charities, and must either make the hospitals complete state institutions as in Germany, or must afford so much per diem for each patient treated in the wards and in the outpatient clinics. It is doubtful if the government will consent to "taxation without representation"; whether they will pay for hospital maintenance without having a controlling influence on the hospital board. They must, it would seem, eventually obtain this control, and the nationalization of the hospitals must be a matter of the near future.

See what this signifies. The leaders of the profession are on the staffs of the hospitals. Men who have their paying patients among the well-to-do have refused thus far to accept the government contract and enter the public service. These leading physicians and surgeons will find themselves in the position of either resigning their hospital posts (which, when one considers what hospital opportunities and hospital positions signify, appears to me to be the unlikely course), or of continuing to serve, but now as government officials.

THE IDEAL OF SERVICE IN MEDICAL PRACTICE

Surely, therefore, and by no means slowly, Great Britain is embarked on a course that can lead only to medicine becoming a state service, just as are the army and the navy. From what we know of our brothers across the ocean, we may be sure that they will proceed by compromise; that they will be practical rather than logical in their advance. For long there will exist side by side the state practitioners, paid largely by stipend, and the private practitioners, consultants, surgeons, and specialists, paid by fee; but as the public medical service

grows in extent it will grow in importance and desirability. There will be grades in the service, with possibility of promotion; valuable hospital and administrative posts to be filled. Inevitably the status of the members of the government service will come to be regarded as superior to that of the private practitioners. Once the world and his wife recognizes this, there will be no further difficulty: the whole profession will lapse into public service. It will, indeed, be exactly as with the army and navy. Your general or admiral, even your colonel or your commander, does not take his place in society and is not esteemed according to his wealth, but according to his position as a servant of the nation.

For this, gentlemen, we must realize: The race for wealth to-day is not a race for dollars; nor, after a certain point is reached, not difficult of attainment, is it a race for what dollars will buy. It is eventually a race for social status. If we can secure this status by other more honorable—or less vulgar—means, it is well for us. It is best for us to rejoice in our work for the work's sake and that alone; but if not all are able to attain unto this standard—and we must remember that ambition is healthy and laudable—then at least we do most good and least harm if, serving our fellows, we serve also the state, and develop a relative rank dependent on capacity and merit; comforted by the assurance that our work well done will bring us sufficient for our comfort, for the due education and maintenance of our family, and for our wife to meet the social enemy in the gate with due recognition. As medical men, what more ought we to need? There will be no socialistic dead level of sameness in such a future. Individual work and capacity will tell, though it will show itself mainly by position achieved and only secondarily by dollars.

This, it seems to me, is the future that lies open to us in this continent. It may be objected that here we have no Lloyd George and no workingman's insurance act to bring about the change. Quite so, but we have other influences. The development of an adequate and well-equipped public health service in every state of the Union is sure to come. And over a large part of the country, especially in the center and West, we have institutions whose influence undoubtedly is working toward the end I have indicated. I refer to the state universities and to the huge bonus which the states through these universities afford to the student who takes the

six- or seven-year medical course. Even in institutions like your own, supported by private beneficence, I wonder if you realize that, while you pay what appear to be considerable fees, these fees represent only about half the cost of your education. The other half is a free gift to you from private individuals, and that not for your individual benefit but for the public good. This gift to the medical student, whether by the state or by the philanthropist, can mean only that the public recognizes that good medical attendance is a public need—aye, a public service. It is an indication that the community is prepared to go further—to call to itself an army whose function is to save life, not to destroy.

So, gentlemen, it comes to this, that, despite all the present-day temptations to which I have referred, to-day and in the future as even in the past care must be not for ourselves but for our fellows. If we desire not so much an upper seat in the synagogue as a serene mind and self-respect as the greatest of worldly possessions, let us not trouble ourselves about money-making. With your training, all that is necessary will come to you—you need have no fear.

I happened a few hours ago to come across once more a short address which Rudyard Kipling delivered to the students at McGill University six years ago. I do not think I can conclude better than by quoting some of his words:

Money dominates everybody except the man who does not want money. You may meet that man in your farm, in your village, in your legislature. But be sure that, whenever and wherever you meet him, as soon as it comes to a direct issue between you, his little finger will be thicker than your loin. You will go in fear of him; he will not go in fear of you. You will do what he wants; he will not do what you want. You will find that you have no weapon in your armory with which you can attack him; no argument with which you can appeal to him. Whatever you gain, he will gain more. . . . If your wealth is necessary for you, for purposes not your own, use your left hand to acquire it, but keep your right hand for your proper work in life.

Gentlemen, may you fare well in your life work.

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